

1. IDENTIFICATION

Product Name: C.I.A Natraseal
Other Names: Industrial Coating
Chemical Family: Solvent based Silicon Coating
Molecular Formula: Not available
Recommended Use: Industrial Protective Coating
Supplier: C.I.A Concrete
ABN: 46 075 158 009
Address: 20 Endeavour Drive, Kunda Park Qld 4556
Telephone: +61 7 5445 2399
Emergency Phone: **Poison Information Centre +61 13 11 26**
All other inquiries: +61 7 5445 2399

2. HAZARDS IDENTIFICATION

Hazard Nature

This product is classified as hazardous under the GHS criteria.

GHS Classification

Flammable Liquids: 3; Aspiration Toxicant: 1; Acute Toxicity - Inhalation: 2; Acute Toxicity - Dermal: 2; Specific Target Organ Toxicity (Repeated Exposure): 1

Signal Word

Warning

GHS Pictograms



Hazard Statement

Flammable liquid and vapour

Hazard Statements

H226: Flammable liquid and vapour
H301+311+331: Toxic if swallowed, in contact with skin, or if inhaled.
H261: In contact with water releases flammable gas
H315+320+335: Causes skin, eye, and respiratory irritation
H305: May be harmful if swallowed and enters airways
AUH066: Repeated exposure may cause skin dryness or cracking
H336: May cause drowsiness or dizziness

Precautionary Statements

P102: Keep out of reach of children.
P271: Use only outdoors or in a well-ventilated area.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P262: Do not get in eyes, on skin, or on clothing.
P243: Take precautionary measures against static discharge.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+312+101: IF SWALLOWED: Call a POISON CENTRE/doctor, if you feel unwell, and have product container or label at hand.

3. COMPOSITION: Information on Ingredients

SAFETY DATA SHEET

C.I.A Natraseal

Chemical Ingredient	CAS Number	Proportion (% v/v)
Isopropyl Alcohol	67-63-0	90-99%
Silane/Siloxane	70131-67-8	1-<6%
Titanium tetrabutanolate	5593-70-4	0-<2%
Octamethylcyclotetrasiloxane	556-67-2	0-<2%
Methanol	67-56-1	0-<2%

4. FIRST AID MEASURES

For advice, contact Poisons Information Centre (Phone Australia: 13 1126) or a doctor.

Ingestion

If swallowed, DO NOT induce vomiting. Keep at rest. Seek immediate medical attention.

Eye Contact

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Skin Contact

Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing, including shoes, and launder before reuse. Seek medical attention for skin irritations.

Inhalation

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Seek immediate medical attention.

First Aid Facilities

Provide eye baths and safety showers.

Medical Attention

Treat according to symptoms. Avoid gastric lavage - aspiration of product to the lungs may result in chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress providing fire fighters with this Material Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable Extinguishing Media

Water spray, fine mist, dry chemical or foam. Do not use water jets.

Hazards from combustion products

This product is flammable and has the potential to develop explosive mixtures with air with extreme heat.

Precautions for fire fighters and special protective equipment

Full protective clothing and self-contained breathing apparatus

Hazchem Code

3Y

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Prevent product from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours or dusts from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

Methods and materials for containment

Major Land Spill

- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible fire and explosion hazard, where present.
- Prevent product from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.
- Take measures to minimise the effect on the ground water.
- Contain the spilled product using the resources in the spill kit.
- Recover by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”

Major Water Spill

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard, where present.
- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”.

7. HANDLING AND STORAGE

Precautions for Safe Handling

This product is flammable. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Use grounding leads to avoid discharge (electrical spark).

Conditions for Safe Storage

Store in a cool, dry place away from direct sunlight. Do not pressurise, cut, heat or weld containers – residual vapours are flammable. This product is flammable and will fuel a fire in progress.

Incompatible Materials

Natural rubbers, light-weight plastics, aluminium.

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

National Exposure Standards

The time weighted average concentration (TWA) for this product is: 350mg/m³, which means the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short term exposure limit (STEL) is: None specified; consider 5 g/m³, which is the maximum allowable exposure concentration at any time. Replacing a TWA or STEL value for some products is a Peak Limitation value (Peak): None applies in this case. In addition to the exposure concentrations may be a subsidiary caution in such cases where the product is a skin sensitiser, represented as (Sen), where none applies in this case.

Biological Limit Values (BLV)

None specified

Engineering Controls: Ventilation

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion proof equipment.

Personal Protective Equipment

Respiratory Protection: Where concentrations in air may approach or exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type 'A' filter material is considered suitable for this product.

Eye Protection: Always use safety glasses or a face shield when handling this product.

Skin/Body Protection: Always wear long sleeves, long trousers, or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves be worn when handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical Value
Appearance	None	Semi opaque mobile liquid
Boiling Point/Range	°C	150
Flash Point	°C	42
SG/Density (@ 15°C)	g/ml; kgm ⁻³	0.72
Vapour Pressure @ 20°C	kPa	Not determined
Vapour Density @ 20°C	g/ml; kgm ⁻³	Not determined
Autoignition Temperature	°C	Not determined
Explosive Limits in Air	% vol/vol	Not determined
Viscosity @ 20°C cPs,	mPas	100
Percent volatiles	% vol/vol	Not determined
Acidity/alkalinity as pH	None	Neutral
Solubility in Water	g/l	Negligible
Other solvents	-	Organic solvents

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Technical Data Sheet.

10. STABILITY AND REACTIVITY

Chemical stability

Stable at room temperature and pressure

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Avoid contact with strong oxidising agents.

Hazardous decomposition products

Carbon dioxide, carbon monoxide on decomposition or incomplete oxidation

Hazardous reactions

Excessive heat

Hazardous polymerisation

Will not occur

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

This material will cause irritation to the throat and tube to the stomach and may cause nausea. Vomiting may cause the product to be aspirated to the lungs possibly resulting in chemical pneumonitis.

Eye Contact

Eye contact with this product will cause redness and swelling with a burning sensation and blurred vision. The severe temporary effects can be reversed with immediate first aid.

Skin Contact

Contact with this product can result in mild irritations evidenced by swelling, redness, and dryness of the affected area.

Inhalation

Vapours at elevated temperatures will cause dizziness and drowsiness. Vapours at room temperature should be controlled through adequate (do not use in confined spaces) or mechanical ventilation.

Chronic Effects

Repeated or prolonged contact with this product will result in irritant contact dermatitis if PPE precautions are not observed.

Other Health Effects Information

Persons with pre-existing skin conditions will be sensitive to this product.

Toxicological Information

Oral LD₅₀: Xylene: (rat) > 2000 mg/kg

Dermal LD₅₀: Xylene: (rabbit) > 2000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Toxicity:

Fish Toxicity LC₅₀: Cumene: Rainbow Trout: 2700 µg/L

Daphnia Magna EC₅₀: Cumene: 1400 µg/L

Blue-green algae: This product is considered harmful to aquatic plant life.

Green algae: This product is considered harmful to aquatic plant life.

Persistence/Biodegradability: Elements of this product are expected to persist.

Mobility: This product is likely to be mobile on release to the environment.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain product residue that may be harmful. Ensure that empty packaging is managed in accordance with Dangerous Goods regulations.

Special Precautions

This product is not suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product should be treated and disposed through chemical waste treatment, or considered for use in recycling.

14. TRANSPORT INFORMATION

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	1263	UN No.	1263	UN No.	1263
Proper Shipping Name	Paint & Paint related materials	Proper Shipping Name	Paint & Paint related materials	Proper Shipping Name	Paint & Paint related materials
DG Class	3	DG Class	3	DG Class	3
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None
Packing Group	III	Packing Group	III	Packing Group	III
Hazchem	3Y	Hazchem	3Y	Hazchem	3Y

Dangerous Goods Segregation

This product is regulated as Class 3 Dangerous Goods, packing group III.

15. REGULATORY INFORMATION

Country/Region: Australia
Inventory: AICS
Status: Listed
Poisons Schedule: 5

16. OTHER INFORMATION

Reasons for Issue: Upgrade to GHS SDS; amalgamated supplier and regulatory changes in all sections.

Abbreviations:

AICS: Australian Inventory of Chemical Substances
CAS Number: Chemical Abstracts Number
GHS: Global Harmonised System
IARC: International Agency for Research on Cancer
PPE: Personal Protective Equipment
N/R: Non-regulated
N/A: Not applicable
UN: United Nations

References:

Supplier Safety Data Sheets

<http://hsis.safework.gov.au/SearchHS.aspx> (January 17)

Animal toxicology data: <http://chem.sis.nlm.nih.gov/chemidplus> (January 17)

Ecotoxicology data: http://cfpub.epa.gov/ecotox/quick_query.htm (January 17)

Sax's Dangerous Properties of Industrial Materials, Richard J Lewis Snr., pub. Canada (2005)

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority.

Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact C.I.A Concrete Pty Ltd.
